

WIC: A Public Health Program that Works

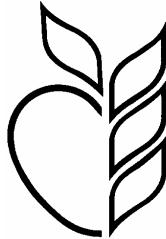
2001-2002 Annual Report

Special Supplemental Nutrition Program for
Women, Infants and Children



**WIC ANNUAL REPORT
FISCAL YEAR 2001-2002**

Special Supplemental Nutrition Program for Women, Infants and Children (WIC)



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This report is a compilation of the most frequently requested and most often used North Dakota WIC participation data. It is intended to be self-explanatory for a wide variety of readers. Where appropriate, information about state averages and national goals is provided.

The data presented in this publication is from the North Dakota WIC software system and from information gathered from WIC families through the annual client survey.

We thank the local WIC staff for making this publication possible. Local staff take the measurements, ask the questions and record the information on the computer. Without them, it would not be possible to describe the health status of the WIC participants. Without their competent, caring approach to helping families, the many successes attributed to WIC would not be realized.

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INTRODUCTION

WIC: A PROVEN SUCCESS STORY

Since 1974, the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) has focused on preventing health problems caused by inadequate nutrition.

The WIC Program was created to promote and maintain the health and well being of nutritionally at-risk women, infants and young children. This is accomplished through:

- A carefully defined package of supplemental nutritious foods.
- Nutrition education and counseling to improve dietary practices.
- Referrals that link participants to other vital health care and social services.

Pregnant, breastfeeding and recently delivered non-breastfeeding women and their infants and children up to age 5 are eligible for WIC services. To receive WIC services, applicants must meet income guidelines and have a nutritional risk. Nutritional risks include abnormal nutritional conditions detected by biochemical or anthropometric measurements, nutritionally related medical conditions and dietary deficiencies that impair or endanger health.

Local WIC staff provide nutrition education as directed by the individual's health care plan. Licensed nutritionists counsel high-risk individuals. Breastfeeding is promoted and supported through classes, prenatal education, and individual counseling, and by providing breast pumps. North Dakota WIC has more than 50 certified lactation consultants and counselors.

WIC is considered to be one of the most successful of all public health programs. A variety of studies that support this fact show that:

- Dollars invested in WIC save dollars in other programs, such as Medicaid.
- WIC mothers are less likely to have low birth weight infants and premature babies.
- WIC children have better vocabulary test scores.
- WIC children are better immunized and are more likely to have a regular source of medical care.

Over the years, WIC's scope has expanded significantly. As an important part of public health, WIC addresses the health and social issues that affect maternal and child well-being, such as immunization, substance abuse, homelessness, referral and coordination with Medicaid. At the same time, WIC has increased the numbers of families served through increased federal appropriations and food cost savings from rebates on infant formula.

The North Dakota WIC Program is administered by the Division of Maternal and Child Health, North Dakota Department of Health, and is operated locally by 27 public and private not-for-profit health agencies. Currently, almost 14,000 North Dakota residents are enrolled in WIC and receive services in all counties of the state.

WIC is available to all eligible applicants without regard to race, color, national origin, age, sex or handicap.

NORTH DAKOTA WIC AGENCIES AND CLINICS

Twenty-seven agencies provide WIC services at 86 different sites across the state. WIC services are available to residents of all North Dakota counties. Each WIC office is linked to a health service agency that facilitates referral to other health care services. WIC also works closely with other community agencies that help people in need. North Dakota WIC agencies include county and district health agencies, hospitals and tribal health programs.

CLINIC LOCATIONS

Ashley Medical Center serves McIntosh County. The central office is in Ashley. (288.3433)
Services also offered in: Wishek

Cavalier County Health Unit serves Cavalier County. The central office is in Langdon. (256.2402)

Central Dakota Clinic serves Wells County. The central Office is in Harvey. (324.4856)

Central Valley Health Unit serves Stutsman and Logan counties. The central office is in Jamestown. (252.8130)
Services also offered in: Napoleon

City-County Health Department serves Barnes County. The central office is in Valley City. (845.8520)

Cooperstown Medical Center serves Griggs and Nelson Counties. The central office is in Cooperstown. (797.2221)
Services also offered in: Lakota McVile

Custer District Health Unit serves Burleigh, Kidder, Morton, Oliver, Mercer, Grant and Sioux counties. The central office is in Bismarck. (255.3397)
Services also offered in: Mandan Steele Tappen Hazen
Elgin New Salem Glen Ullin Beulah

Fargo Cass Public Health serves Cass County. The central office is in Fargo. (277.1455)
Services also offered in: Casselton Charism Center Downtown Fargo (Public Health)

First District Health Unit serves Bottineau, Burke, McHenry, McLean, Renville, Sheridan and Ward counties. The central office is in Minot. (825.1376)
Services also offered in: Minot AFB Kenmare Bottineau Westhope
Bowbells Powers Lake Velva Towner
Drake Washburn Garrison Max
Turtle Lake Mohall Sherwood

Foster County Health Department serves Foster County. The central office is in Carrington. (652.3087)

Lake Region District Health Unit serves Ramsey, Benson, Eddy, Pierce and Towner counties. The central office is in Devils Lake. (662.7043)
Services also offered in: Rugby New Rockford Minnewaukan
Maddock Cando

Linton Hospital serves Emmons County. The central office is in Linton. (254.4030)

Oakes Community Hospital serves Dickey and LaMoure counties. The central office is in LaMoure. (883.5179)

Services also offered in: Ellendale Oakes

Pembina County Health Department serves Pembina County. The central office is in Cavalier. (265.4764)

Services also offered in: Pembina Wahalla

Presentation Medical Center serves Rollette County. The central office is in Rolla. (477.3161)

Services also offered in: Rolette

Ransom County Health Department serves Ransom County. The central office is in Lisbon. (683.5823)

Richland County Health Department serves Richland County. The central office is in Wahpeton. (642.7748)

Services also offered in: Hankinson

Sargent County District Health Unit serves Sargent County. The central office is in Forman. (724.6241)

Southwestern District Health Unit serves Stark, Billings, Dunn, Golden Valley, Hettinger, Bowman and Slope counties. The central office is in Dickinson. (483.1942)

Services also offered in: Bowman New England Mott Belfield
Richardton Beach Killdeer

Spirit Lake Sioux Nation serves the Spirit Lake Reservation located in Benson County. The central office is in Fort Totten. (766.4242)

Steele County Public Health Department serves Steele County. The central office is in Finley. (524.2060)

Turtle Mountain Band of Chippewa serves the Turtle Mountain Reservation located in Rolette County. The central office is in Belcourt. (477.6436)

Services also offered in: Dunseith

Union Hospital serves Traill County. The central office is in Mayville. (786.3800)

Services also offered in: Hillsboro

Upper Missouri District Health Unit serves Williams, Divide, McKenzie and Mountrail counties. The central office is located in Williston. (577.5373)

Services also offered in: Tioga Crosby Watford City Stanley
New Town

Valley Health and WIC serves Grand Forks County. The central office is in Grand Forks. (775.4251)

Services also offered in: Grand Forks AFB Northwood

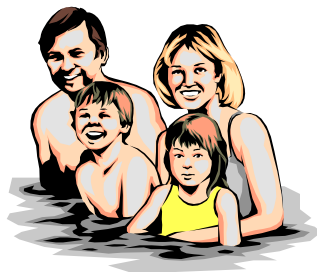
Walsh County Health Department serves Walsh County. The central office is in Grafton. (352.5139)

Services also offered in: Park River

West River Regional Medical Center serves Adams County. The central office is in Hettinger. (567.6198)

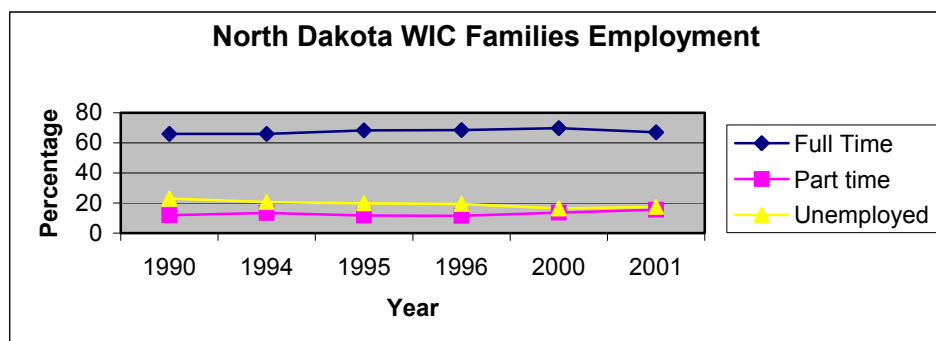
DEMOGRAPHIC PROFILES

PROFILE OF AN AVERAGE NORTH DAKOTA WIC FAMILY

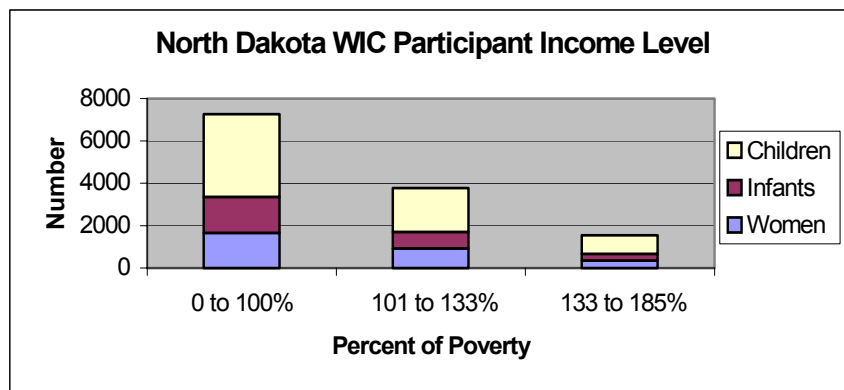


- * The average WIC family size is 3.5 people.
- * Sixty-two percent of North Dakota WIC families are two-parent households.
- * One or both parents are employed full-time in 67 percent of WIC families. Another 15 percent of families are supported by part-time work only.
- * Seventy-one percent of WIC families are white; 19 percent, American Indian; 5 percent, Hispanic; 4 percent, black; and less than 1 percent, Asian.
(Note: This data does not include the Standing Rock and Three Affiliated Tribes reservations. Since Native American children make up only 8 percent of the North Dakota population, the 19 percent WIC participation of Native Americans shows North Dakota WIC is reaching this high-risk population.)

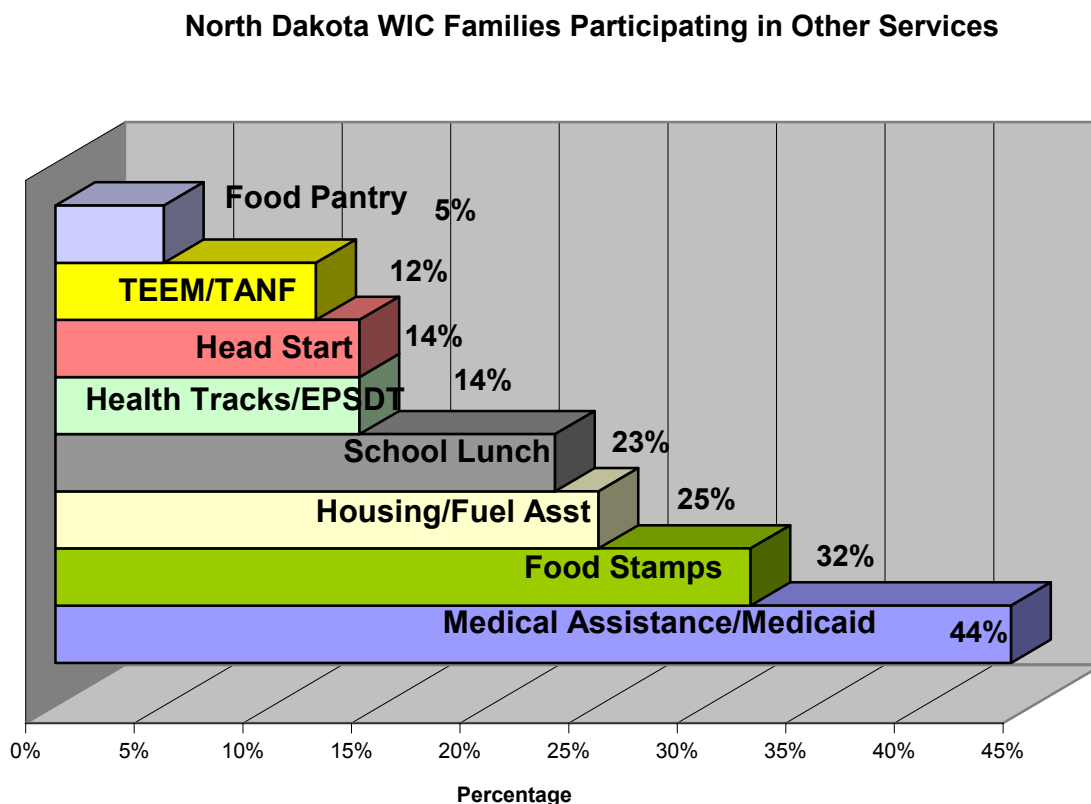
Employment Trends. North Dakota WIC families traditionally have a significant number of adults in the workforce. In 2001, one or both parents were employed full-time in 67 percent of WIC families, and another 15 percent of families are supported by part-time work. These percentages have increased slightly over the past 11 years. The number of unemployed households has averaged around 19 percent of the families on WIC.



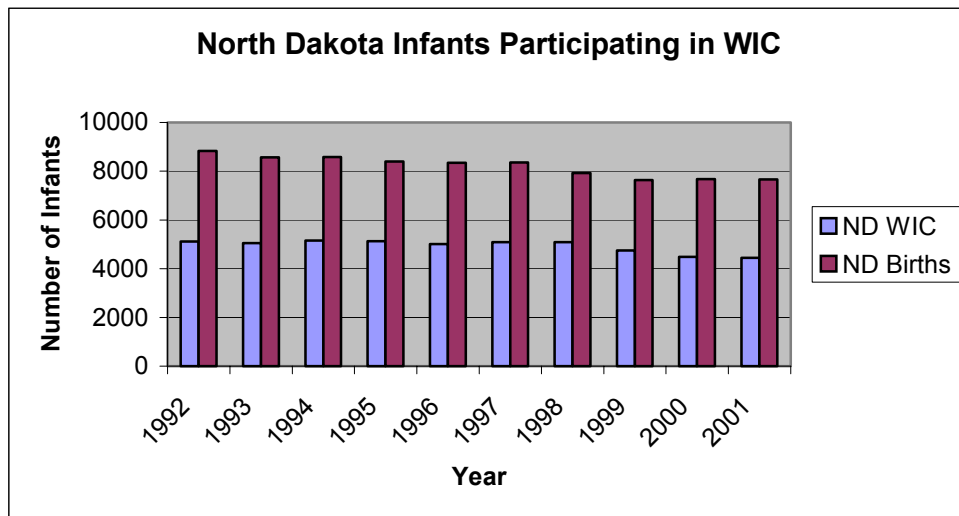
Income Level. Approximately 58 percent of the WIC families have incomes at or below 100 percent of poverty. (The annual income at the poverty level for a family of four is \$18,100.) WIC serves families with incomes up to 185 percent of the poverty level, which means in 2001 a family of four could earn up to \$32,653 annually and still receive WIC benefits.



Referral Services. Referral to other health and support services is an important part of WIC. Many families participate in other services.



North Dakota Infants on WIC. Even though the total number of births for North Dakota has been steadily decreasing the past few years, WIC's percentage of infants has been consistently around 60 percent of the infants born in North Dakota.



WIC FOODS

Each month, WIC clients receive a food voucher listing the amounts of specific nutritious foods that they may purchase at their local WIC-approved vendor. WIC clients use their monthly food vouchers for specific nutritious foods like milk, cheese, juice, cereal, eggs, peanut butter, dried beans, infant formula, infant cereal and infant juices. WIC participants are allowed to shop at any WIC-authorized store. Currently, some 235 grocers and pharmacies participate in the North Dakota WIC Program.

Typical monthly food benefit for a pregnant woman

- 11 half gallons of milk: whole, reduced fat or non-fat
- Six containers of 100 percent juice with vitamin C
- 36 ounces of cereal
- One pound of dried beans, peas or lentils OR one jar of peanut butter
- Two dozen eggs
- Two pounds of cheese

Average value of this food package: \$40.55

Typical monthly food benefit for a child

- Eight half gallons of milk: whole, reduced fat or non-fat
- Five containers of 100 percent juice with vitamin C
- 36 ounces of cereal
- One pound of dried beans, peas or lentils OR one jar of peanut butter
- Two dozen eggs
- One pound of cheese

Average value of this food package: \$38.86

The typical monthly food benefit for a non-breastfed infant is \$86.03.

Dollars Spent in Each County. More than 7 million dollars are spent annually in more than 250 community grocery stores to purchase WIC foods. (County totals do not include WIC funds from Standing Rock or Three Affiliated Tribes WIC programs.)

**NORTH DAKOTA WIC
ESTIMATED ANNUAL FOOD DOLLARS BY COUNTY**

County	WIC food dollars	County	WIC food dollars
Adams	\$29,745	Mountrail	\$22,930
Barnes	\$110,300	Nelson	\$38,420
Benson	\$231,760	Oliver	*
Billings	*	Pembina	\$115,880
Bottineau	\$48,335	Pierce	\$50,195
Bowman	\$42,755	Ramsey	\$205,735
Burke	\$19,210	Ransom	\$75,600
Burleigh	\$693,420	Renville	\$20,450
Cass	\$1,096,215	Richland	\$224,945
Cavalier	\$52,670	Rolette	\$700,240
Dickey	\$72,505	Sargent	\$35,320
Divide	\$16,110	Sheridan	\$25,405
Dunn	\$13,630	Sioux	*
Eddy	\$29,125	Slope	*
Emmons	\$97,290	Stark	\$296,830
Foster	\$56,390	Steele	\$16,730
Golden Valley	\$16,730	Stutsman	\$294,970
Grand Forks	\$832,850	Towner	\$17,970
Grant	\$17,350	Traill	\$92,330
Griggs	\$27,885	Walsh	\$236,720
Hettinger	\$26,025	Ward	\$928,900
Kidder	\$29,125	Wells	\$42,140
LaMoure	\$41,520	Williams	\$276,375
Logan	\$28,505		
McHenry	\$53,290	State Total	\$7,807,335
McIntosh	\$34,080		
McKenzie	\$24,790		
McLean	\$69,405		
Mercer	\$50,195		
Morton	\$228,040		

(* No county-specific data collected)

HEALTH AND NUTRITION INDICATORS: WOMEN

This section contains information about maternal demographics, health status and health behaviors, collected as part of the health screening to determine eligibility.

Data Regions. For data assessment purposes, the counties have been grouped into 10 regions. These are:

- 1. Upper Missouri District** – Divide, Williams, Mountrail and McKenzie counties.
- 2. First District** – Bottineau, Burke, McHenry, McLean, Renville, Sheridan and Ward counties.
- 3. Rolette County.**
- 4. Lake Region** – Ramsey, Benson, Eddy, Pierce, Cavalier and Towner counties.
- 5. North Red River** – Pembina, Walsh, Grand Forks, Nelson and Traill counties.
- 6. South Red River** – Cass, Steele, Richland, Barnes, Ransom and Sargent counties.
- 7. James River District** – Griggs, Barnes, Foster, Stutsman, LaMoure, Dickey, Logan and McIntosh counties.
- 8. South Central District** – Wells, Kidder, Burleigh and Emmons counties.
- 9. Custer District** – Oliver, Mercer, Morton, Grant and Sioux counties.
- 10. Southwest District** – Stark, Billings, Dunn, Golden Valley, Hettinger, Bowman, Adams and Slope counties.

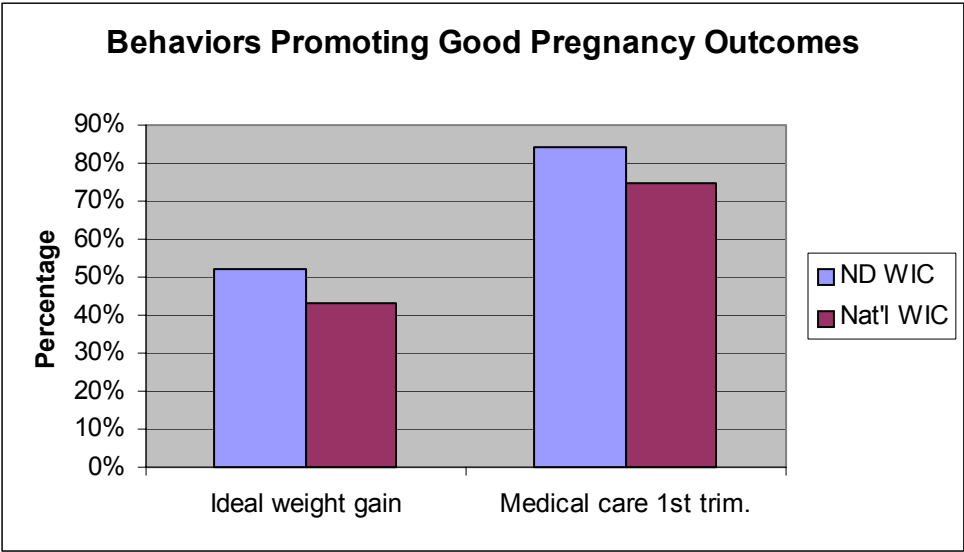
Maternal Education and Age. Education level and date of birth are collected for each woman who enrolls in WIC.

In 2001, 88 percent of North Dakota WIC women completed high school or received a GED, compared to only 64 percent nationally. Education often is used as an indicator for economic status.

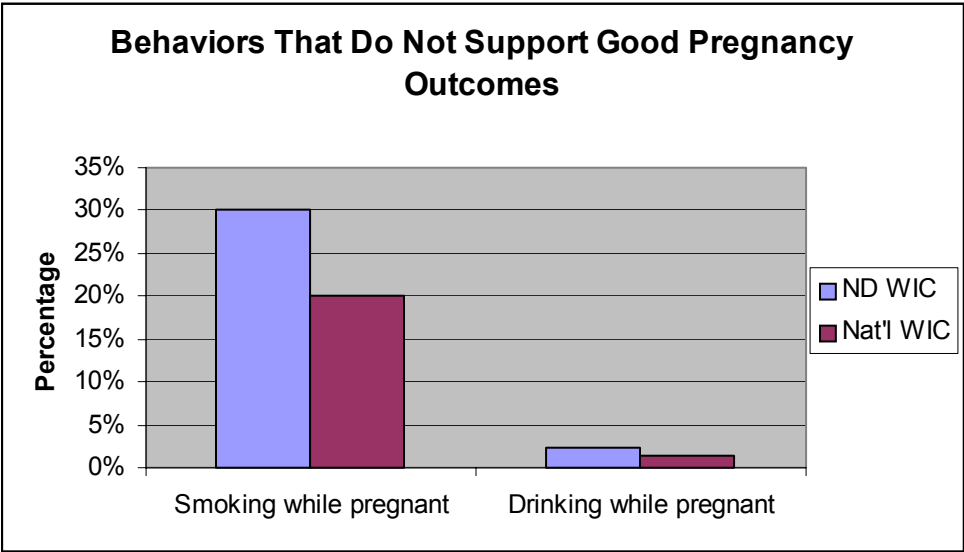
In 2001, 22 percent of North Dakota WIC participants were teenagers (less than 20 years old), which is the same as the national average. The adolescent mother is confronted with many stresses imposed upon the nutritional needs associated with continued maternal growth. Poor weight gain and low intakes of a variety of nutrients are more common in pregnant adolescents.

Region	% with HS degree	% of teenage mothers
1. Upper Missouri District	79.7%	21.4%
2. First District	85.8%	20.1%
3. Rolette County	60.3%	31.8%
4. Lake Region District	63.9%	25.4%
5. North Red River	77.7%	23.1%
6. South Red River	76.9%	20.0%
7. James River	81.1%	19.4%
8. South Central	81.8%	22.8%
9. Custer District	90.4%	17.9%
10. Southwest District	82.4%	21.6%

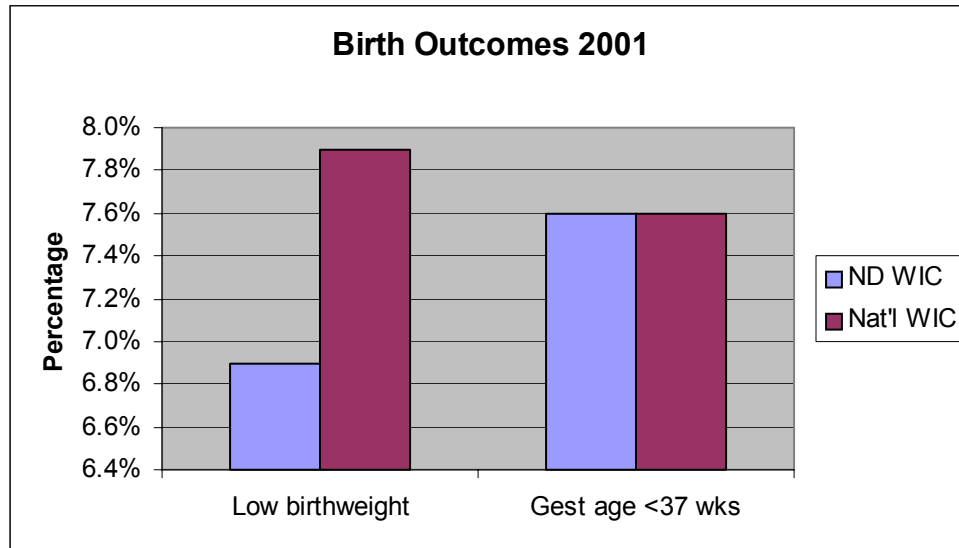
Prenatal Behavior. Pregnant North Dakota WIC participants are more likely to gain the ideal amount of weight during their pregnancy and enroll in medical care during their first trimester of pregnancy than their national counterparts. Both behaviors are desired.



Pregnant North Dakota WIC participants are more likely to smoke while pregnant and almost twice as likely to drink during the pregnancy than WIC moms in the rest of the nation.

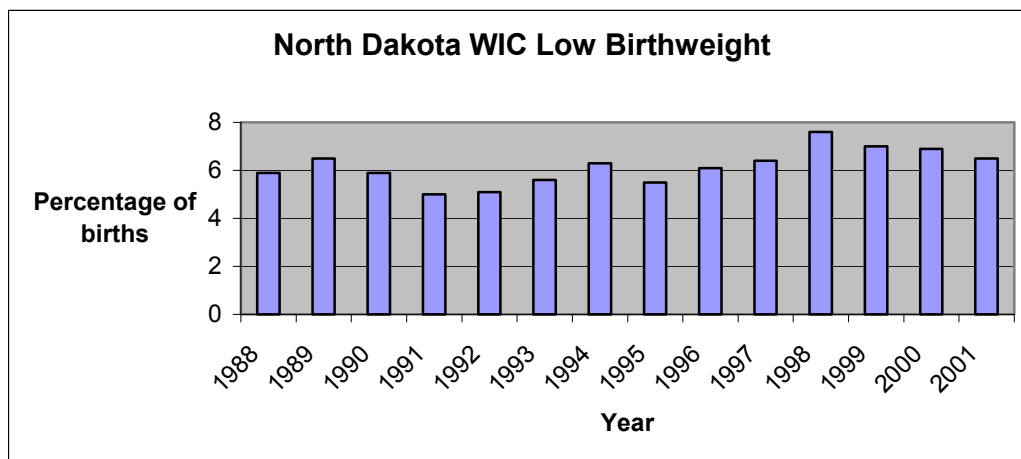


Pregnancy Outcome. The main demographic variables influencing pregnancy outcome are maternal age, marital status and socioeconomic status. North Dakota has a similar percentage of teenage mothers and a larger number of married mothers, compared to WIC nationally. North Dakota moms have higher education levels as well. In spite of the fact that the prenatal behavior may not be optimal, North Dakota WIC moms are less likely to experience a low birthweight infant.



Low Birthweight. Low birthweight (less than 2,500 grams) is the single most important factor affecting neonatal mortality. Risk factors for delivering a low birthweight infant include pre-pregnancy underweight, smoking and drinking alcohol. While North Dakota has lower numbers of mothers who are underweight, a higher percentage of North Dakota WIC mothers smoke and drink while pregnant than the WIC national average.

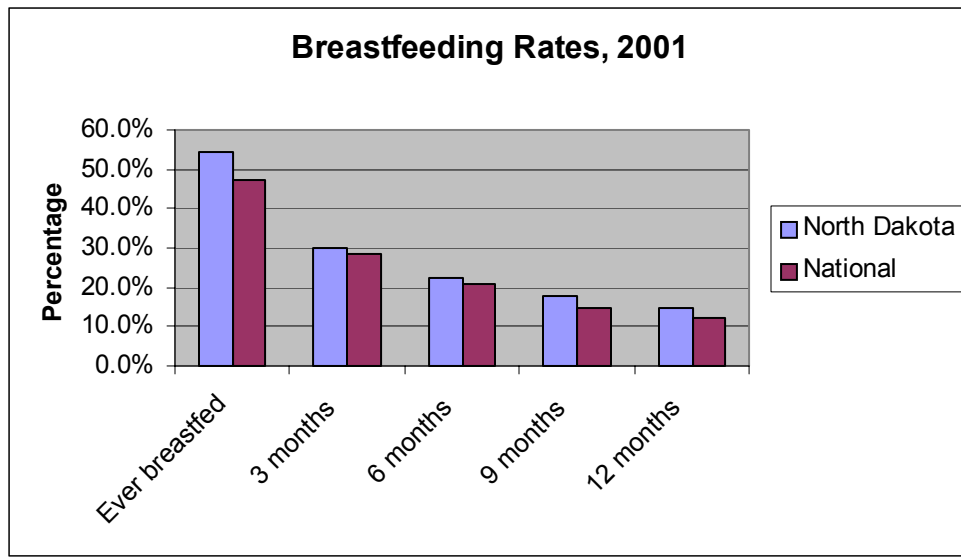
<u>2001</u>	<u>North Dakota WIC</u>	<u>National WIC</u>
Pre-pregnancy underweight	11.1%	13.7%
Smoking while pregnant	29.7%	19.7%



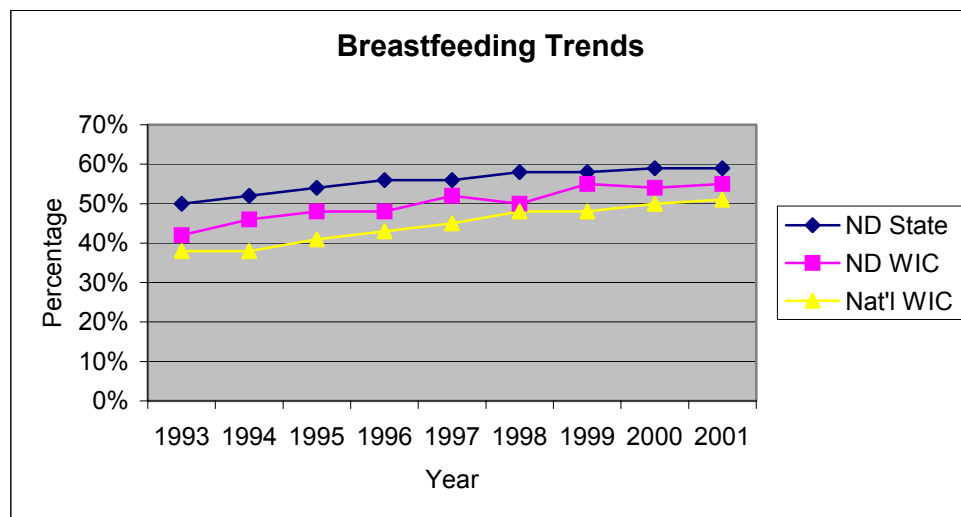
BREASTFEEDING

In 2001, 54.4 percent of North Dakota WIC infants were breastfed and 22.2 percent continued to breastfeed for at least six months. That compares to a national prevalence of 47 percent of ever breastfed and 20.6 percent at six months.

Human milk is the optimal food for infants from birth to age 1 and beyond. Breastfeeding has been shown to reduce medical costs in the first year of life and protects against childhood obesity. Breastfeeding provides a time of intense maternal-infant interaction and helps mom return to her pre-pregnancy weight.



Breastfeeding Trends. The North Dakota WIC Program actively promotes breastfeeding as the optimal method of infant feeding. Breastfeeding is on the increase for the WIC population and the state as a whole.

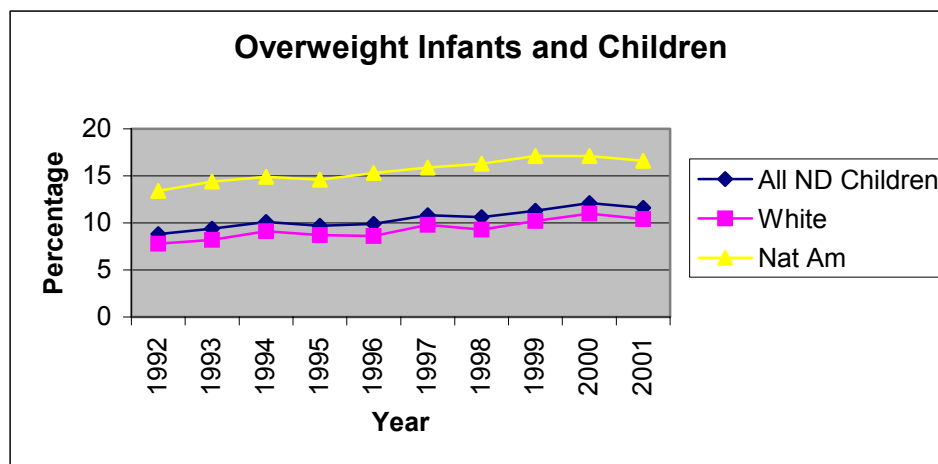


HEALTH AND NUTRITION INDICATORS: INFANTS AND CHILDREN

This section contains measures of health status and health behaviors collected as part of the health screening to determine WIC eligibility. Information provided includes prevalence of overweight and anemia among child participants.

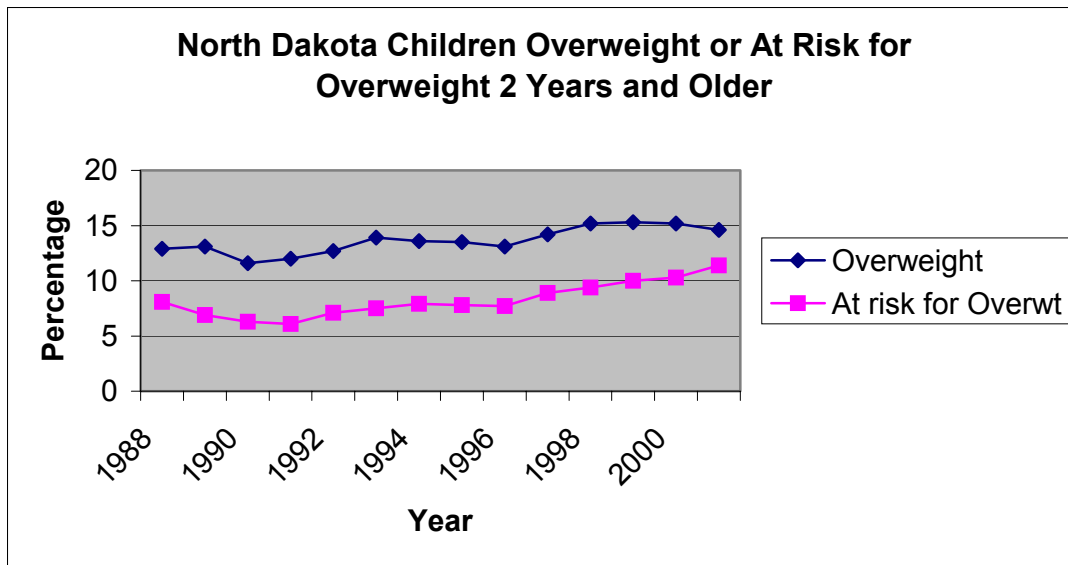
Overweight. Overweight means weight-for-height is greater than 95th percentile on the appropriate growth chart. A measurement of height and weight is required at WIC certification. These measurements usually are taken at the WIC office using standardized techniques.

In 2001, the prevalence of overweight was 11.6 percent of WIC infants and children. This compares to the national rate of overweight children of 12.8 percent. Overweight children are a significant concern for Native Americans. The percentage of overweight children for all races is increasing in North Dakota and nationally.



At Risk for Overweight. This nutrition risk applies only to children age 2 and older. At risk for overweight means a body mass index-for-age greater than or equal to 85th percentile, based on National Center for Health Statistics/Centers for Disease Control and Prevention (NCHS/CDC) age and sex specific growth charts.

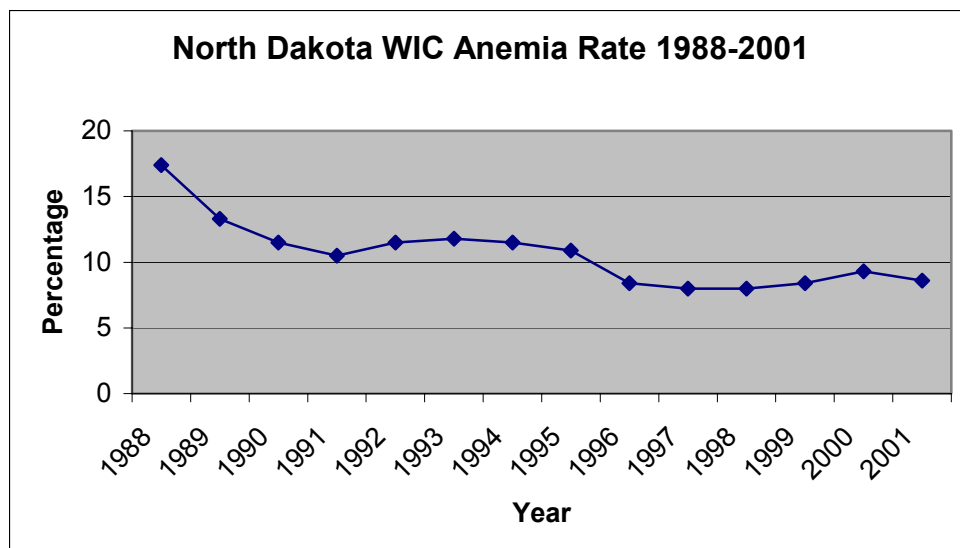
During 2001, the prevalence of at risk for overweight was 14.6 percent of North Dakota WIC children age two years and older (compared to 15.1 percent nationally). Twenty six percent of North Dakota WIC children are overweight or at risk for becoming overweight. Again, both the trend for overweight and the numbers of children at risk for becoming overweight are increasing.



The WIC Program has the opportunity to be an important player in public health efforts to curb the increasing rise in obesity by actively identifying and enrolling children who may be at risk for becoming overweight in childhood or adolescence. WIC can assist families in making dietary and lifestyle choices to reduce obesity, such as choosing to breastfeed, reducing television viewing time, eating more fruits and vegetables, and increasing physical activity as a family.

Hematology. Low hemoglobin means a value below the baseline for healthy, well-nourished individuals of the same sex and age. Hemoglobin is the usual screening test used in the North Dakota WIC Program for iron deficiency. Hemoglobin tests are performed at one certification per year, unless the value is low.

In 2001, the prevalence of low hemoglobin among North Dakota WIC children was 8.6 percent, compared to a national WIC rate of 13.6 percent. Anemia can impair energy metabolism, temperature regulation, immune function and work performance. In infants and children, even mild anemia may delay mental and motor development. The WIC Program has played an important part in the national decline in anemia.



PARTICIPANT SURVEY

Each year, WIC participants are asked about the value of WIC services. They offer suggestions about how to improve WIC services and provide some demographic information so we can improve and better target our services. Described in this report are some results from the 2002 North Dakota WIC client survey.

In 2001, North Dakota WIC clients were asked to rate the services provided by WIC. On a scale of 1 to 5, with 1 being everything is great, 96 percent of families gave WIC a 1 or a 2 rating.

Question: WIC has helped my family and me make the following changes ...

1. Eat more fruits	52.9%
2. Eat more vegetables	49.5%
3. Cook/prepare a larger variety of foods on my own	49.2%
4. Have a regular mealtime	37.9%
5. Have regular snack times for my children	35.4%
6. Cook with foods lower in fat	34.2%
7. Drink a lower fat milk	27.9%
8. Let my children (if old enough) help in the kitchen	26.0%
9. Let my children decide how much to eat	21.7%
10. Eat more dried beans	19.8%
11. Watch less TV	15.3%

Question: We want our WIC services provided to you in the best way. What kind of “grade” (with “A” for very good to “F” for fail) would you give your WIC agency for the following?

Statement	Average Grade
WIC staff usually see me on time.	A
Appointment times are convenient and meet my needs.	A
Someone usually greets me within the first few minutes after I arrive.	A
My WIC appointment is well organized- the staff seem to be “on top of things.”	A
WIC staff are friendly and are happy to see me.	A
WIC staff and I discuss <i>my</i> needs or concerns.	A
WIC newsletters and pamphlets are interesting and useful.	A-
I usually look forward to going to my WIC appointment.	B+
WIC helps me get other services (like shots for my child, etc.).	B+